

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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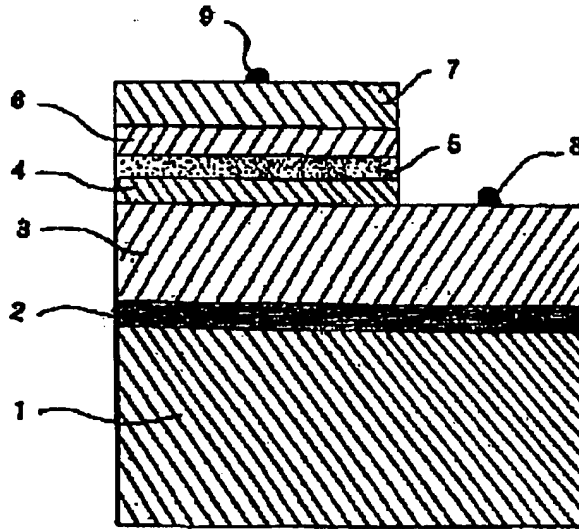
APPLICATION DATE : 20-04-99  
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APPLICANT : SHARP CORP;

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TITLE : ACTIVATION METHOD OF  
POTASSIUM NITRIDE-BASED P-TYPE  
COMPOUND SEMICONDUCTOR  
LAYER



ABSTRACT : PROBLEM TO BE SOLVED: To realize decrease in the resistance of a p-type conductive layer by activating potassium nitride-based p-type compound semiconductor layers.

SOLUTION: In this method for activating p-type layers 6 and 7 included in a potassium nitride-based compound semiconductor device, light having wavelengths included in the range of ultraviolet ray to visible light is irradiated on the p-type layers 6 and 7 under a temperature within the range of 200-500°C. Thereby hydrogens bonded with p-type dopants contained in the p-type layers 6 and 7 are separated and removed, promoting activation of the p-type dopants as acceptors.

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